UST news

SC DHEC

December 2004

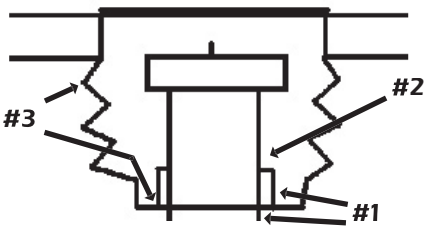
Happy Holidays!

The Spill Bucket Issue

John Kneece, Compliance Section

In the past year or so, UST compliance inspectors have discovered quite a few spill buckets that were not liquid-tight. This means that when the driver disconnected the delivery hose, any product that ran into the spill bucket went OUT OF THE SPILL BUCKET and into the ground. Also in the past year, we have discovered soil and groundwater contamination that was the result of leaking spill buckets.

As you know, UST compliance inspectors get to each facility about once a year. A spill bucket that leaked a couple gallons of product after every delivery could make quite a mess in a year. For example, if there is a delivery every third day, there will be 120 or so deliveries each year. If the spill bucket leaked, hundreds of gallons of product would be released.



During their work, our inspectors have found suspect buckets fairly easy to spot. The inspectors have found buckets that leaked around the fill riser because the clamps were not tight (#1). They found buckets that leaked because the donut (grommet or washer) between the spill bucket collar and the fill riser had worked its way out and left a gap (#2). Further, the inspectors have found buckets that leaked because the plastic split or separated and left a hole in the bottom or sides of the bucket (#3). They found metal buckets that leaked because corrosion had eaten away the walls or bottom.

In some cases, the inspector could see soil or backfill through the opening. In other cases, the inspector used water to see if a suspect bucket would hold liquid. In all cases, the inspector spotted the problem just by looking into the spill bucket.

When inspectors find a spill bucket that is not tight, they ask the owner to repair or replace the spill bucket. In most cases, the inspector also asks the owner to conduct a "site check" in accordance with the UST Closure and Assessment Guidelines. A site check means taking soil samples under the spill buckets. A laboratory then analyzes the samples, and the owner sends the results to our Regulatory Assistance Section for review.

During a recent meeting in our offices, a representative for one equipment manufacturer said, "Spill containment basins are not a permanent piece of hardware; they need to be monitored and replaced when they no longer work." Our inspectors are finding buckets that no longer work. Owners and operators could find these problems sooner with monthly checks. Finding the problem quickly is a good thing because discovering releases early limits the size of the problem.

It is important that owners and operators fix leaking spill buckets quickly. Owners should also stop fuel deliveries to a system where the spill bucket may be leaking. Spill bucket repair or replacement costs a lot less than having to clean up a release to the environment.

If you have questions about what to look for or how to check to be sure the bucket is tight, ask your local inspector. Or, call the Compliance Help Desk, 1-803-896-6240, or (from within the state only) 1-800-826-5435.

TIER II REPORT DATE COMING SOON

Paul Lee, Bureau of Air Quality, and John Kneece, UST Compliance Section

The Emergency Planning and Community Right to Know Act (EPCRA) requires states and regulated facilities to report on and track hazardous chemical storage facilities. Section 312 of EPCRA says that facilities have to report annually to state and local officials on the quantity of hazardous chemicals stored at the facility. These reports are called Tier II Reports. In South Carolina, the State Emergency Response Commission requires Tier II Reports be submitted to the Department of Health and Environmental Control by March 1st of each year.

Inside . . .

Some convenience stores and some truck stops are exempt from the reporting requirement. If the retail facility stores less than 75,000 gallons of gasoline and less than 100,000 gallons of diesel fuel, all entirely underground, AND the facility has been in compliance with the UST regulations all year, no report is required. If a retail facility stores more than 10,000 pounds (about 1,200 gallons) of fuel above ground or if the facility exceeded the 75,000/100,000 numbers at any time during the year, a Tier II report is required. Some Local Emergency Planning Committees and counties in the state do require annual Tier II reports from all retail facilities. Several counties also collect fees based on Tier II reports. The fees are used to support local fire departments. So, even if your facility is exempt from the federal requirement, check with the county emergency preparedness office to see if you still need to file a local report. The regulation points out that marinas do not qualify for the exemption. Marinas are required to file Tier II reports annually like other petroleum storage facilities (government locations, fleet operations, utilities, bulk storage facilities, emergency generators, farms, etc.) if their storage underground and/or aboveground is greater than 10,000 pounds (about 1,200 gallons).

Copies of reporting forms, free reporting software, contact information, and instructions are available online at http://www.scdhec.net/eqc/baq/html/epcra.html.
Remember, the report covers a calendar year (January 1 through December 31) and must be filed by March 1st of the next year. If you have specific questions about Tier II reporting, please call Paul Lee at the Bureau of Air Quality, (803) 898-3849.

The newsletter staff wants to point out again...in certain cases, UST facilities that are in compliance with the UST regulations don't have to make these reports!!!

USING AN AUTOMATIC TANK GAUGE (ATG)

Rebecca Lindler, Compliance Section

Successfully using an ATG for tank release detection monitoring means the owner/operator takes the following steps:

STEP 1. READ. Read the reports the ATG prints.

STEP 2. RESPOND. If the report documents a "pass," file the report with the leak detection records for the tank for that month. If the results are other than pass, go to the next step.

STEP 3. REPORT. The regulations require a report within 72 hours of monitoring results that may indicate a release has occurred. If the ATG gives a result other than pass, report the information to the UST Program Compliance Section at (803) 896-6240 or 1-800-826-5435 (from within SC).

STEP 4. INVESTIGATE. The compliance staff can help the owner determine the proper actions to take based on the situation. For example, for a "fail" result, the staff will ask the owner/operator about the conditions during the test, such as, "Did a delivery recently occur?" or, "Did anyone dispense product during the test period?" Then the compliance staff and the owner/operator will determine the best course of action...retest, empty the system, reprogram the ATG, check other systems for problems, etc.

STEP 5. DOCUMENT. Save at least one passing test per tank each month. Failure to maintain sufficient records could result in having to conduct a 0.1 gph precision test to make up for failure to conduct proper leak detection with an ATG. Occasionally, owners keep all the tapes from the ATG wound on the spools or just piled in a box. If this is the desired approach, then our inspectors request that the owner and operator flag the appropriate pass test for each tank. Otherwise, the inspector may miss the positive results that are bundled in the spool and request additional tank tightness testing.

TANK DOCTOR...S.I.R.--The questions revisited.

Leslie Yasinsac- Compliance Section

If you are using or considering SIR as your leak detection method, the answers to these questions should help you "DO THE RIGHT THING."

QUESTION: How should I handle an "inconclusive" SIR report?
First time "Inconclusive" results must be reported to the UST Program immediately and investigated using the guidelines published by the vendor. If the investigation proves a "tight" system, no further actions are necessary. If the investigation does not turn up evidence to support a tight system, the owner/operator must immediately conduct tank and line tightness tests for the affected system. Two consecutive "inconclusive" results must be followed by an immediate tank and line tightness test regardless of any investigation findings.

QUESTION: My vendor says I should expect a few "inconclusives" as I begin to use SIR. Is there a grace period to allow us to work out the bugs in a new system? There is not a grace period--if you're using SIR, you must report failing or inconclusive results beginning the first month you use SIR as your release detection method.

QUESTION: Can I just throw away my old release detection records when I switch to SIR? No, the requirement for leak detection records is to maintain records for a year. For example, if you've switched to SIR as a leak detection method and have been conducting SIR analysis for four monthly periods, you should have four months' worth of SIR reports and eight months' worth of whatever leak detection you were doing before. You should also maintain a copy of the most recent tank and line tightness tests until you have a complete year of SIR analysis reports for your system.

QUESTION: Since SIR does line leak detection as well as tank leak detection, do I still need line leak detectors on my pressurized lines?
With pressurized lines, you must be able

to detect a large leak (3 gallons per hour) within one hour. SIR only monitors for leaks at monthly intervals and can detect a small leak (0.2 gal/hour) within the 30-day time allowed by the regulations. However, SIR cannot detect a large leak within the one-hour detection limit required by the regulations. So, the answer is "yes," you need a line leak detector to monitor the line for the large leak since SIR will not do the job within the performance time allotted by the regulation.

QUESTION: I am using SIR; do I still need to do a function check on the line leak detectors? Yes, you must test the line leak detector for function and complete any other annual maintenance for UST system components, regardless of the release detection method you are using.

VENT LINES--UST SMOKING GUNS.

Trey Morgan, Compliance Inspector

Does anyone know what vent lines are? Are they a part of your underground tank system? Are they always loaded with potential to cause harm? You bet they are!

Vent lines are those tall pipes over there across the parking lot, or by the fence, or maybe behind the building, or possibly in the trees, or hidden in the canopy. The UST system needs vent lines to allow the tanks to "breathe." For example, when the tanker truck arrives to drop a load of fuel, an equal volume exchange occurs: one gallon of fuel goes into the tank as one gallon of air is released out of the tank.

"Sounds pretty simple. So how can they be dangerous?" you ask? Well, where are your vent lines? You don't know? Put this article down and go find out.... Ok, you're back. Are the vent lines next to your building? When you are getting a gas delivery does the inside of your store have a really strong gas odor? Do your neighbors complain about a heavy gasoline smell on their property? Gasoline vapors, especially in an enclosed area such as inside the store, can create an explosion hazard! They are also a health hazard. How are you feeling today?

Now you may be worried. I don't blame you. So, let's take a look at the requirements for vent lines. Freestanding vent lines (lines that are away from any building and stand alone) are supposed to be at least 12 feet tall. Vent lines near or mounted to the building are supposed to extend at least 3 feet above the roofline. Whether freestanding or attached, vent lines should be equipped with rain caps. Rain caps are those funny-looking things on top of the vent lines that keep the rain out and let air pass freely. You don't have any funny-looking things on top of your vent lines? You need some; they are important, too.

Recently, Tim Pearson, our newest inspector, and I found a really hazardous vent line installation. The store had vent lines mounted on the side of the building; however, these particular vent lines stopped short of the roof, under the eaves, just below the vent opening for the attic space of the building. There was also an attic exhaust fan close by. As the fan sucked hot air out of the attic, air was drawn into the attic through the vent opening under the eaves. During a fuel delivery, vapors from the tanks came out of the vent lines and were sucked into the building vent by the exhaust fan. I went inside and asked a clerk if she smelled gas inside when the gas truck delivered fuel. She said the odor was so strong she had to go outside every time.

What do you think could have happened at that store with all the gas fumes inside? Please check your vent lines today. Are they the right height? Are they properly capped? Is there a potential receptor nearby (exhaust fan, a/c intake, second-story window fan, etc.)? If you spot something that doesn't look right, please call us.

"You got some `splaining to do!"

Chris Doll, Assessment and Corrective Action Division

Remember when Ricky Ricardo would come home to another "I Love Lucy" situation? He could not readily determine what had happened or why, and he looked to Lucy for an explanation.

A similar thing happens when the project managers in the Assessment and Corrective Action Division review reports from assessments and cleanups of underground storage tank releases. For example, the report may show an increase in contaminant concentrations in a well that has previously been clean but no information is provided as to why concentrations are increasing or what the cleanup contractor plans to do about it. Or, an assessment report may contain a map of the groundwater surface showing a deep depression of the water table in the center of the site but give no reasons for this unnatural occurrence.

Interpreting the data gathered during an assessment or cleanup is critical to understanding the migration and remediation of UST releases. It is not enough to simply enter data into a computer program and accept the output at face value. Professional engineers and geologists must review both the data and the output to ensure that the conclusions presented in the report (certified under their signature and seal) adhere to scientific principles and, above all, make good sense.

Extraordinary conditions can and do occur at UST sites; however, they rarely occur for no reason. When unusual conditions occur, the Department, along with the tank owner and operator, expects the environmental professionals to interpret the information and determine what is happening, why it is happening, and what it means at the site. If this interpretation is not included in a report, do not be surprised if you receive a letter from your UST project manager saying that someone has "...got some `splaining to do."

GOFER - Not an Oily Deal

GOFER, Give Oil For Energy Recovery, is Santee Cooper's used motor oil collection and recovery program. At no cost to the business, the GOFER program will collect and transport the used oil from the facility to Santee Cooper's incinerating facility, where it will be used for energy recovery. As an energy source, used motor oil provides approximately 135,000 Btus per gallon. Santee Cooper will be responsible and liable for any oil spills or a release caused by its employees or equipment during and after the used oil is pumped into the GOFER truck. Santee Cooper's trucks are equipped with rollover protection, safety valves, a spill response kit, and rear drive-under protection. Each driver has a commercial driver's license and is trained in the collection of used oil. A manifest will be provided for each shipment of used oil received. Their drivers have over 75 years of over-the-road experience. Santee Cooper will collect heating oil, fuel oil, diesel fuel, mineral oil, and used oil from any site in South Carolina. They prefer to collect at least 200 gallons per stop and will collect up to 200,000 gallons at one time. They will not remove product from drums. They can be contacted at (800) 753-2233.

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